

REICHEL, J.; BALINT, A.

Synthesis of the dyestuffs of the 1,4-benzoquinonic series. IV. On the reaction of chloranil with 2,5-aminonaphthol-7-sulfonic acid, the oxidizing and sulfonating cyclization of the diarylaminated product, and the dioxazinic disazoic and dithiazinic disazoic disulfonated dyestuffs. Studii cerc chim 9 no.3:521-532 '61.

1. Baza de cercetari stiintifice a Academiei R.P.R., Laboratorul de coloranti, Timisoara.

REICHEL, J.; VILCEANU, R.; SCHMIDT, W.

Catalytic condensation of carbon tetrachloride with secondary aromatic amines. Studii cerc chim 13 no.11:751-756 N '64.

1. Research Base, Timisoara, Rumanian Academy, 24 Bd. M. Viteazul.

CZECHOSLOVANIA

REICHL, J.; Institute of Physiology of Domestic Animals, Faculty A, College of Agriculture (Ustav Fysiologie Hospodarskych Zvirat AF VSZ), Brno.

"Suggested Use of the Method of Signal Diagrams in Respirometric Experiments."

Prague, Czechoslovenska Fysiologie, Vol 15, No 5, Sep 66, pp 388 - 389

Abstract: Graphical representation of the energetic metabolism in the organism is presented. Coefficients of energy released and stored by the organism are discussed. Graphical and arithmetical solutions of problems of metabolism are described. 2 Figures, 1 Western, 1 Czech reference. Submitted at 3 Days of Physiology of Domestic Animals at Liblice, 8 Dec 65.

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CZECHOSLOVANIA

REICHL, J.; ROCI, S.; VLCKI, A.; Institute of Physiology of Domestic Animals (Ustav Fysiologie Hospodarskych Zvirat) A /Ab-  
breviation not explained / Faculty (F), College of Agriculture (VSZ), Brno; Poultry Research Institute (Vyskumny Ustav pre Chov Hydiny), Ivanka pri Dunaji; Research Institute for Fodder Materials (Vyzkumny Ustav Krmivarsky), Pohorelice.

"Study of Energy Values of Poultry Fodder."

Prague, Czechoslovenska Fysiologie, Vol 15, No 5, Sep 66, pp 388 - 390

Abstract: Experiments were conducted with white Plymouth chickens 4-5 weeks old. Intake of dry material, protein and calories was determined. The intake and retention of the materials increased with an increasing ratio of calories to proteins, and decreased when the content of cellulose of the fodder was increased. 2 Western references. Submitted at 3 Days of Physiology of Domestic Animals at Liblice, 9 Dec 65.

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L 1706-66 EMP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l)/EWA(c) JD/HW  
 ACCESSION NR: AP5020700 CZ/0032/65/015/008/0603/0608

AUTHOR: Modracek, O. (Engineer); Reichl, J. (Engineer)

TITLE: Technique of hot extrusion of steels and design of modern hydraulic presses

SOURCE: Strojirenstvi, v. 15, no. 8, 1965, 603-608

TOPIC TAGS: extrusion, steel extrusion, hot extrusion, carbon steel, low alloy steel, stainless steel, steel bar, steel shape, steel tube

ABSTRACT: Czechoslovakia possessed no facilities for hot extrusion of steels and ferrous alloys until 1963 when the Skoda CXB 1600 hydraulic extrusion press was put in operation. The press was built by Skoda Works in Pilsen. It has a capacity of 1600 Mp and an extrusion speed of 200—550 mm/sec. During the test run, carbon-, low-alloy and stainless-steel bars, shapes, and tubes were extruded with reductions up to 97%. Orig. art. has: 9 figures and 2 tables. [DV]

ASSOCIATION: VUHZ, Prague; SKODA-Oborovy podnik, Plzen (SKODA-Branch Enterprise)

SUBMITTED: 00

ENCL: 00

SUB CODE: IE, MM

NO REF SOV: 000  
 Card 1/1 DP

OTHER: 004

ATD PRESS: 4085

REICH, T.

Transparent conductive coatings on glass. p.195.  
(Slaboproudý Obzor, Vol. 16, No. 4, April 1957, Praha, Czechoslovakia)

SG: Monthly List of East European Accessions (MEAL) IC. Vol. 6, No. 9, Sept. 1957. Uncl.

REICHEL, Theofil; JARES, Vladimir, inz.

Certain properties of transmission secondary emitters. Slaboproudy  
obzor 22 no.9:546-550 '61.

1. Vyzkumny ustav vakuove elektrotechniky, Praha.

(Electron optics)

G

Country : RUMANIA  
 Category : Organic Chemistry. Synthetic Organic Chemistry  
 Abs. Jour : Ref Zhur - Khim., No 5, 1959, No. 15460  
 Author : Reichol, I.; Pod, L.  
 Institution : Polytechnic Institute, Timisoara  
 Title : On the Introduction of Mercurio-Oxalate Residue into Phenols with the Purpose of Preparing Insecticides-Fungicides  
 Orig. Pub. : Bul. stiint si tehn. Inst. politehn. Timisoara, 1956, 1, No 1, 351-359  
 Abstract : A series of oxalates of  $o\text{-HgC}_6\text{H}_4\text{O}$  (I) was synthesized.  $\text{CO}_2$  is passed into a solution of  $o\text{-ClHgC}_6\text{H}_4\text{OH}$  in 6% NaOH, and I is separated out. Suspension of I in water with  $(\text{COOH})_2$  (II) is boiled for five minutes while mixing,  $(o\text{-HOC}_6\text{H}_4\text{HgOOC-})_2$  (III) is filtered off, which does not melt up to  $275^\circ$ . By melting II and III, an insoluble  $o\text{-OCOC}_6\text{H}_4\text{HgOOCOC}_6\text{H}_4\text{OCO-o}$  was obtained. 6 g. of  $\text{C}_6\text{H}_5\text{OH}$  (IV) and 12 g. of

Card: 1/4

Country :  
Category :

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Obs. Jour : Ref Zhur - Khim., No 5, 1959. No. 15460

Author :  
Institute :  
Title :

Orig. Int. :

Abstract : (CH<sub>3</sub>COO)<sub>2</sub>Hg are melted while mixing for ten  
cont'd. minutes, 200 ml. of water are added, boiled  
for five minutes, the filtrate is heated with  
a saturated aqueous solution of 6 g. of (COO-  
Na)<sub>2</sub> (V), the precipitate is washed with alco-  
hol, and 1-(HOCCOO)-2,4-(HgOCCOO•Hg/2)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>  
(VI) is separated out, with yield of 5 g., de-  
composition point about 200°. VI was also ob-  
tained by melting 1-HO-2,4-(CH<sub>3</sub>COOHg)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>  
with II at 150°. By boiling VI with 20% NaOH

Cards: 2/4

G - 73



G

Country :  
 Category :  
 Abs. Jour : Ref Zhur - Khim., No 5, 1959, No. 15460  
 Author :  
 Institut. :  
 Title :  
 Orig. Pub. :  
 Abstract : or  $\text{Na}_2\text{CO}_3$ , 1-HO-2,4-( $\text{HgOOCCHOHg}/2$ ) $_2\text{C}_6\text{H}_3$  (VII)  
 cont'd. was synthesized. 5.4 g. of HgO are added to a  
 solution of 7 g. of IV and 6.3 g. of II in 125  
 ml. of water at about  $100^\circ\text{C}$  for one hour, heat-  
 ed for ten hours while mixing, boiled for two  
 hours, and VII is separated out. 1.35 g. of V  
 are dissolved in a solution of 1.55 g. of 2,4-  
 diacetoxymercuro-o-cresol in 10 ml. of 5%  
 NaOH, while heating, and infusible 1-( $\text{HOOCO-}$   
 $\text{CO})$ -2,4-( $\text{HgOOCCHOHg}/2$ ) $_2$ -5- $\text{CH}_3\text{C}_6\text{H}_2$  (VIII) is  
 Card: 3/4

Country :  
Category :  
Iss. Jour : Ref Zhur - Khim., No 9, 1959, No. 15460  
Author :  
Instit. :  
Title :

Orig. Pub. :

Abstract : filtered out. VI and VIII possess insecticide-  
cont'd. fungicide properties.-- F. Velichko

Card: 4/4

G - 74

REICHEL

Distr: 4E2c(j)

✓ Aromatic phosphorus compounds. I. Phosphorous acid esters of the anilide and the 2-naphthylamide of 2-hydroxy-3-naphthoic acid. I. Reichel and D. Purdela. *Acad. rep. populare Romane, Baza cercetari stiint. Timisoara, Studii cercetari stiinte chim.* 5, No. 3-4 71-86 (1958).—2-Hydroxy-3-naphthoic acid (I) was condensed with aniline (II) in the presence of an excess of  $\text{PCl}_5$  (III): 15.4 g. I, 10 ml. II and 60 ml.  $\text{PhNMe}_2$  was heated to  $120^\circ$ , and then 12-15 g. III added dropwise. Heating was continued 1 hr. at  $130^\circ$  and 1 hr. at  $140^\circ$ . After cooling and adding 400 ml. 10% aq. NaOH, 3 layers (a, b, and c) were obtained, from which, a, the lowest, was sepd., and mixed with 200 ml. slightly alk.  $\text{H}_2\text{O}$  (pH 8). A resin pptd. and the aq. suspension was decanted. This operation was repeated 3 times. The resin was then mixed with 100 ml. slightly alk. alc. (pH = 8), heated to boiling and filtered off, the solid extd. with cold slightly acid  $\text{H}_2\text{O}$ , then with hot EtOH, the EtOH eliminated and the residue dried to give 7 g. tertiary phosphorous acid ester of I anilide, m.  $241-3^\circ$ . The Et ester (IV) of the phosphorous acid ester of I anilide was obtained from layer b and the  $\text{H}_2\text{O}$  and alc. exts. of c. The first 2 were mixed, acidified with HCl and the ppt. filtered off. The ppt. was heated with 200 ml. EtOH to boiling and the soln. cooled and filtered. This was repeated several times, until the ethanolic ext. was colorless. The ethanolic filtrates were mixed with the ethanolic exts. of c. The liquid was concd. to 30% of its initial vol. by distn., cooled and filtered; the filtrate was mixed with twice its vol. of  $\text{H}_2\text{O}$  and the ppt. filtered off to give IV, decomp.  $175-80^\circ$ , without melting. IV could also be obtained by heating 3 g. tertiary phosphorous acid ester with 200 ml. 10% aq. NaOH to  $90-5^\circ$ , filtering and repeating the alk. extractions. The combined filtrates were acidified with HCl, the ppt. filtered off, extd. with hot alc. and worked up as before. The secondary phosphorous acid ester of the anilide of I was obtained by heating an ethanolic soln. of IV with an excess of concd. HCl, concg.

to half the vol., cooling, filtering and diluting the filtrate with a double vol. of  $\text{H}_2\text{O}$ . The ppt. formed was the desired substance. Condensation of I with 2-naphthylamine (V) in the presence of an excess of III and of  $\text{PhNMe}_2$  was carried out as in the case of II. The substance obtained from layer c was an addn. mixt. of the tertiary phosphorous acid ester and the naphthylanilide of I; it m.  $240^\circ$ . By working up the layer b as described with II, an equimol. mixt. of the secondary and primary phosphorous acid esters was obtained. This mixt. was sepd. by fractional solubilization in aq. alc. The decompn. point of the Et ester of the secondary phosphorous acid ester was  $155-160^\circ$ , and of the primary  $164-9^\circ$ . All these substances could serve as dyes for wool fibers, as well as for cotton fibers, and gave green, yellow, brown, and reddish colors with diazotized 2-nitroaniline. ~~Reichel-Horowitz~~

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JAJ(NB)(Mg)

REICHEL, J., prof.; DEMIAN, A.

Separating components in the synthesis of organic dyestuffs. XVI. On the separating efficiency of the central uric group. Studii chim Timisoara 7 no.3/4:269-275 J1-D '60.

(EEAI 10:9/10)

1. Comitetul de redactie, "Studii si cercetari stiinte chimice," Timisoara (for Reichel).

(Dyes and dyeing) (Organic compounds) (Urea)

5(3)

R/003/60/011/04/005/041  
D0015/D3001

AUTHORS: Reichel, I.; Vîlceanu, R.

TITLE: Contributions to the Benzoylation of Naphthalene

PERIODICAL: Revista de Chimie, 1960, Vol 11, Nr 4, pp 206-207

ABSTRACT: C.D. Nenitescu and his co-workers prepared benzoyl naphthol by heating benzoyl chloride with naphthalene. To carry out the experiment at a low temperature and to maintain homogeneous conditions to the end of the reaction a modified catalyst ( $\text{AlCl}_3 \cdot \text{CH}_3\text{NO}_2$ ) was used. The benzoylation took place in a carbon disulfide medium at a temperature of  $0^\circ\text{C}$  and an overall yield of 90% gross, i.e. 72% pure, was obtained. Isomer formation was not noticed. By the same reaction, but without any solvent, an overall yield of 65% was obtained. The product was a mixture of isomeric substances, 2-benzoyl naphthol prevailing.

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R/003/60/011/04/005/041  
D0015/D3C01

Contributions to the Benzoylation of Naphthalene

The mixture contained 56% of isomer-2, 20% of isomer-1 and approximately 20% of insoluble matter. The condensation of benzoyl chloride with naphthalene, under the influence of the above-mentioned complex catalyst, corresponded to the general scheme of isomer formation. The authors describe the experiment in detail, giving results of synthesis of 1-benzoyl naphthol and of intramolecular condensation of 1-benzoyl naphthol, indicating the monobenzoylate products of naphthalene which formed and giving results of the separation of the mixture. There are 6 references, 2 of which are Rumanian, 2 French and 2 unidentified.

Card 2/2

REICHEN, I.; PURDELA, D.

Aromatic compounds of phosphorus. II. On the action of phosphorus trichloride upon iodic and iodophenylic acids in the presence of dimethylaniline. p. 547.

Academia Republicii Populare Romine. STUDII SI CERCETARI DE CHEMIE. Bucuresti, Rumania. Vol. 6, no. 4, 1958.

Monthly List of East European Accessions (EEAI) Vol. 8, no. 7, July 1959.

Uncl.

REICHEL, J., prof.; SCHMIDT, W.

Separating components in the synthesis of organic dyestuffs. IV. Preparatory, tinctorial and spectral aspects in the azo groups. Studii chim Timisoara 7 no.3/4:245-254 J1-D '60. (EEAI 10:9/10)

1. Comitetul de redactie, "Studii si cercetari stiinte chimice," Timisoara (for Reichel).

(Dyes and dyeing) (Organic compounds) (Azo dyes)  
(Spectrum analysis)



REICHEL, J.; DEMIAN, A.

The dissolution components in the synthesis of organic dyes. Pt.  
20. Rev chimie Roum 9 no.3:229-251 Mr '64.

1. Laboratory of the Department of Organic Chemistry (Dyes), Rumanian Academy, Timisoara Branch.

REICHEL, J., prof; BALINT, A.

Synthesis of the dyes of the 1,4-benzoquinonic series. I. Arylamination of chloranil with 2,5-aminonaphthol-7-sulfonic acid. II. On the dioxazinic dyes formed through the cyclization of chloranil diarylaminated with acid I. Studii chim Timisoara 7 no.3/4:255-268 **JL-D '60.**  
(EEAI 10:9/10)

1. Comitetul de redactie, "Studii si cercetari stiinte chimice,"  
Timisoara (for Reichel)

|                              |                    |                |
|------------------------------|--------------------|----------------|
| (Dyes and dyeing)            | (Benzoquinone)     | (Aryl groups)  |
| (Amination)                  | (Chloranil)        | (Acids)        |
| (Aminonaphtholsulfonic acid) | (Dioxazine Violet) | (Ring closure) |

REICHEL, J., prof; BALINT, A.

Syntheses of the dyes of the 1,4-benzoquinone series. III. On the dithiazinic dyes formed through the sulfurizing cyclization of the chloranil diarylaminated with acid I. Studii chim Timisoara 8 no.1/2:17-23 Ja-Je '61.

1. Comitetul de redactie, Studii si cercetari, stiinte chimice [Academia Republicii Populare Romine, Baza de Cercetari Stiintifice Timisoara](for Reichel).

(Dyes and dyeing) (Benzoquinone) (Chloranil)  
(Acids)

REICHEL, J.; SCHMIDT, W.

Component separation in the synthesis of organic coloring matters. Pt. 18. Rev chimie 7 no. 1: 461-470 '62.

1. Akademie der RVR, Forschungsstelle Timisoara.

REICHEL, J., prof.; PALEA, R.

Separating components in the synthesis of organic dyestuffs. XVII.  
Absorption spectra of some nonsymmetric and symmetric benzidine dyes.  
Studii chim Timisoara 8 no.1/2:25-39 Ja-Je '61.

1. Comitetul de redactie, Studii si cercetari, stiinte chimice  
[Academia Republicii Populare Romine, Baza de Cercetari Stiintifice  
Timisoara] (for Reichel).

(Dyes and dyeing) (Organic compounds) (Benzidine)  
(Absorption spectra)

REICHEI, J.; BACALOGLU, R.; Schmidt, W.

Infrared spectra of some p-substituted N-phenylbenzamide.  
Studii cerc chim 12 no. 4:299-317 Ap '64.

1. Center of Scientific Research of the Rumanian Academy,  
Timisoara.

[illegible]

kame charakterizován, odtráven, A: 1988, 1989.  
 Sbor vak elektrotech A: 1988, 1989.

[illegible]

REICHEL, F.

CZECHOSLOVAKIA

REICHEL, F., Prom. Vet.

Prague,

Prague, Veterinarstvi, No 3, 1963, pp 109-111

"Finding of Fascioliasis at the Brno Slaughter-  
house in 1958-1961."



CZECHOSLOVAKIA

PITRA, J; REICHLEIT, J

Research Institute for Natural Drugs, Prague  
(for both)

Prague, Collection of Czechoslovak Chemical  
Communications, March 1966, No 3, pp 1392-1394

"Effect of the deactivation of silicagel by water  
on the sorption equilibria."

POLAND

LEPT, Stanislaw and GAWLIK, Zbigniew: Institute of Rheumatology (Instytut Reumatologii) in Warsaw, Director: Prof Dr Med E. REICHER and the Department of Pathological Anatomy (Zaklad Anatomii Patologicznej) of the AM [Akademia Medyczna -- Medical School] in Warsaw, Director: Docent Dr Med R. STANCZYK.

"Rheumatoid Arthritis with Signs of Some Collagenoses, Aschoff's Nodules in the Skeletal Muscles. Case Report"

Warsaw, Polski Tygodnik Lekarski, Vol XLIII, No 5, 28 Jan 1963, pp 178-182.

Abstract: [Authors' English summary modified] A case of rheumatoid arthritis is reported. Signs characteristic of some collagenoses coexisted: hyperplasia of the lung interstitial tissue, multiple Aschoff's nodules in the skeletal muscles and high antistreptolysine titre in the serum. 5 illustrations; 7 references, 4 Polish, 3 Western.

3/1

REICHER, Michal

Edward Loth, his life and work; August 3, 1888 - September 15, 1944.  
Folia morphologica 12 no. 2:219-233 '61.

ROHLING, S.; FELT, V.; VOHNOUT, S.; REICHL, D.

Studies on the effect of some hormones on experimental atherosclerosis.  
IV. On mechanical effects of glucocorticoids on blood and tissue  
lipids and on phospholipid metabolism in normal and atherosclerotic  
rabbits (studies with the aid of radioactive phosphorus — P32).  
Cas.lek.cesk 100 no.27/28:856-860 7 J1 '61.

1. Ustav pro choroby obehu krevniho, reditel prof. dr. K. Weber.  
Vyzkumny ustav endokrinologicky, reditel doc. dr. K. Silink.

(ADRENAL CORTEX HORMONES pharmacol)  
(ARTERIOSCLEROSIS exper) (LIPIDS metab)  
(PHOSPHOLIPIDS metab)

REIMAN, M.

Small furnaces for hardening in the heat treatment of high-speed steel.  
p. 188.

MECHANIK. (Stowarzyszenie Inzynierow i Technikow Mechanikow  
Polskich) Warszawa, Poland. Vol. 4, no. 4, July/Aug. 1959.

Monthly List of East European Accession. (EEAI) LC, Vol. 9, no. 1,  
Jan. 1960:

Uncl.

REINDL, T.

Folk creativeness in industrial designing. p. 47.

ODZIEZ. (Centraine Zarzady Przemyslu Dziewiarskiego, Odziezowego i Ponczoszniczego) Lodz, Poland. Vol. 10, no. 2, February 1959

Monthly list of East European Accession (EEAI) LC, Vol. 8, no. 7, July 1959

Uncl.

STANISLAW, J.; STANISLAW, J.; STANISLAW, A.

Periodic communication with the ...-name development of the ...-name ...  
... ..

... .. (Macelina ... ..  
... ..)

Monthly ... .. ( ... ) ... .., August, 1959

... ..





9(2)

Z/014/EO/000/05/009/043  
D029/D025

AUTHOR: Rejmánek, Miroslav, Engineer

TITLE: An Intermediate-Frequency Transformer<sup>13</sup> For Narrow-  
Band Amplifiers<sup>15</sup> of 10 - 40 MC

PERIODICAL: Sdělovací technika, 1960, Nr 5, pp 174-175

ABSTRACT: The author describes an intermediate frequency transformer (for frequencies above 10 Mc) which was developed by the A. S. Popov VUST (Communication Engineering Research Institute). The transformer employs no iron cores, can be tuned by a variable condenser, has the dimensions of a small electron tube, and is based on a transformer for frequencies up to 11 Mc, which was previously developed. The achieved circuit quality is 120 at a frequency of 20 Mc and

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Z/014/60/000/05/009/043  
D029/D025

An Intermediate-Frequency Transformer For Narrow-Band Amplifiers  
of 10 - 40 MC

150 at a frequency of 40 Mc. The factor of induction heating (at temperatures from +20 to +60 °C) is  $\pm (40 \pm 30) \times 10^{-8}$  °C, the range of operational temperatures from -55 to +70 °C, the tuning range  $\pm 5\%$  to  $\pm 12\%$ , according to the used condenser, and the operational voltage is 320 V d-c. The transformer measures 28 x 28 x 56 mm and is arranged either vertically /Photo 17/ or horizontally /Photo 27/, eventually also as a single circuit /Photo 37/. The coil forms are made of HF bakelite, equipped with ribs to decrease losses /Photo 47/. The shielding covers are made of aluminum by impact extrusion with a diaphragm (partition wall) between the circuits. The circuit quality in relation to the frequency for various coils with

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Z/014/60/000/05/009/043  
D029/D025

An Intermediate-Frequency Transformer For Narrow-Band Amplifiers  
of 10 - 40 MC

different conductor diameters and number of turn is given in Diagram 5. The circuits can be connected either by capacitance, or more commonly by inductance. For this purpose, the partition walls are provided with various openings. The transfer characteristics of the vertical transformer at a circuit quality of 110 and at 20 Mc in dependence of the diameter of holes in the shield are given in Diagram 6, such of the horizontal transformer in Diagram 7. The mechanical elements of the transformer can be also used in input and oscillator circuits. There are 4 photos and 3 diagrams.

Card 3/3

REICHEL, I.

Distr: 4E2c(j)

The separation component in the synthesis of organic dyes. II. A new benzidinepyrazoline dye. <sup>15</sup> Direct Khaki R.P." I. Reichel and R. Palea. Acad. rep. populare Romina, *Baza cercetarii stiint.*, Timisoara, *Studii cercetarii stiint.*, Ser. stiinta chim. 3, No. 3-4, 9-18(1958); cf. C.A. 51, 186135. A dye for cotton fibers is described. It is obtained by coupling tetrazotized benzidine with the intermediate product obtained from diazotized *p*-nitroaniline and H acid (at an acid pH) on the one side (Fierz-David and Blangey, *Grundlegende Operationen der Farbenchemie*, 1938, 227-229 (C.A. 33, 11507)), and with 1-phenyl-8-methyl-5-pyrazolone (I) on the other side. This product dissolved in H<sub>2</sub>O gives a blue soln., a green one at pH 9 and a violet one at acid pH. In order to get a khaki color the following procedure is recommended: 1 g. of the product is dissolved in 50 cc. H<sub>2</sub>O and 30% NaOH is added until the soln. turns green (pH 9). The previously wetted cotton is then introduced into the bath, boiled for 15 min., 1 g. NaCl added, and the mixt. stirred for another 30 min. The cotton is then rinsed thoroughly with cold H<sub>2</sub>O. The color-fastness of this dye was determined in accordance with STAS 1806-50. The fastness to cold H<sub>2</sub>O was 4-5/5. The resistance to bleeding was of grade 3. Fastness in warm washing with soap was 4-5/5. The light-fastness of the dye

is 2 from the scale 1-5 from STAS. III. On the utilization of phenylenediamine systems as a component for separation in the synthesis of nitrogenous dyes. I. Reichel and A. Demjan. *Ibid.* 15-30. Phenylenediamine systems were studied as sepn. components in the synthesis of nitrogenous dyes. The induced polarization in the aromatic nucleus of the systems *p*-phenylenediamine and *m*-phenylenediamine was strong enough to reduce the mobility of the  $\pi$  electrons and therefore the two phenylenediamine systems were able to become sepn. components in the synthesis of nitrogenous dyes. This was true when the appropriate colored components were selected. This sepn. ability was much more pronounced in the para substituted than in the meta substituted compds. The following preps. were carried out in the course of the study. Tetrazotized *p*-phenylenediamine (II) was coupled with salicylic acid (III) and the intermediate product (IV) obtained from diazotized *p*-nitroaniline and H acid; II coupled with PhOH and IV; II coupled with I and IV; diazotized *p*-aminacetanilide coupled with acetylacetanilide (V); II coupled with V and IV; tetrazotized *m*-phenylenediamine (VI) coupled with III and IV; VI coupled with PhOH and IV; VI coupled with I and IV; and diazotized *m*-aminacetanilide coupled with V. All these substances are good cotton dyes.

Mella Paecht-Homowitz

ROMANIA/Organic Chemistry. Organic Synthesis.

G

Abs Jour: Ref Zhur-Khin., No 11, 1959, 38585.

Author : Reichel, I. and Vilecanu, R.

Inst : Rumanian Academy of Sciences.

Title : Synthesis of Aromatic Keto Acids. IV. The Condensation of Phthalic Anhydride with Salicylic Acid.

Orig Pub: Studii si Cercetari Stiint Acad RPR Baza Timisoara, Ser Stiinte Chim, 4, No 3-4, 19-31 (1957) (in Rumanian with French and Russian summaries)

Abstract: It has been found that the condensation of phthalic anhydride (I) with salicylic acid (II) or with the methyl ester of II (III) will take place in  $\text{CH}_3\text{NO}_2$  (taken in the mol ratios [sic] 1: 1) in the presence of over 3 mols  $\text{AlCl}_3$ ; alternate solvents are  $\text{C}_2\text{H}_2\text{Cl}_4$

Card : 1/5

RUMML/Organic Chemistry. Organic Synthesis.

G

Abs Jour: Ref Zhur-Khim., No 11, 1959, 38585.

Attempts to cyclize VI did not give positive results. The condensation of I with III gives a smaller yield of VI than the condensation of I with II. 3.7 gms I are added slowly to a solution of 15 gms  $AlCl_3$  and 8.9 gms  $CH_3NO_2$  in 35 gms  $CS_2$ , after which 3.35 gms II are added at  $46^\circ$ . After 4 hrs the solution is decomposed with 65 gms of ice and 1 ml conc  $H_2SO_4$ , the solvents are steam-distilled,  $Na_2CO_3$  is added to make the residue alkaline, the solution is filtered, and VI is separated from the filtrate, yield 51.3%, mp  $246^\circ$  (from aqueous  $CH_3COOH$ ). When a similar condensation is carried out using 3.7 gms I and 3.35 gms II in the presence of 4.5 mol  $AlCl_3$  in IV with the difference that the solution is heated for 2 hrs at  $90^\circ$

Card : 3/5

RUMML/Organic Chemistry. Organic Synthesis.

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APPROVED FOR RELEASE: Tuesday, August 01, 2000

CIA-RDP86-00513R00144

Abs Jour: Ref Zhur-Khim., No 11, 1959, 38585.

and then at  $125^\circ$  (time not indicated), the yield of VI is 18.7%. The application of a similar procedure to the reaction of I with II (using the same amounts as above) in 30 gms V gives 20.1% of VI and 6% 4- $ClC_6H_4COOCH_2COOH$ -2 (VII), mp  $142^\circ$  (from aqueous  $CH_3COOH$ ). 5 gms I are added slowly with stirring to a solution of 12.5 gms  $AlCl_3$  and 5.65 gms  $CH_3NO_2$  in 25 gms IV, followed by the addition of 5 gms III; after 30 min the solution is heated over a water bath to  $60^\circ$  and after 4 hrs to  $90^\circ$ , followed by 10 min at  $125^\circ$ , after which the solution is poured over ice. Following the distillation of IV and  $CH_3NO_2$ , the residue is heated 2 hrs over a water bath with 10%  $Na_2CO_3$  solution, the solution is filtered while hot, and VI is precipitated with HCl; yield 29.3%. 3.75 gms I is

Card : 4/5

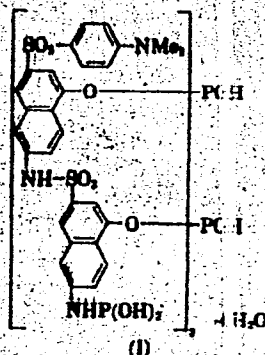
G-17

Card : 5/5

REICHEL 1.

Aromatic compounds of phosphorus. II. Phosphorus trichloride reacts on 2-amino-5-naphthol-7-sulfonic and 2-phenylamino-5-naphthol-7-sulfonic acids in dimethylaniline. J. Reichel and D. Purdels. *Acad. rep. populare Romania, chim. chim. 5, 347-54 (1958)*.—PCl<sub>3</sub> (8 cc.) was gradually introduced in a soln. of 10.5 g. 2,5,7-H<sub>2</sub>N(HO)-C<sub>10</sub>H<sub>6</sub>SO<sub>3</sub>H and 60 cc. PhNMe<sub>2</sub> and the mixt. kept 2 hrs. at 130–40° under mech. agitation. The resinous mixt. yielded 11 g. (crude) I, decomp. 270–84°. Acid cleavage of I with 15% HCl at 95–100° gave 2,5,7-H<sub>2</sub>N[(HO)PO]C<sub>10</sub>H<sub>6</sub>SO<sub>3</sub>-C<sub>6</sub>H<sub>4</sub>NMe<sub>2</sub>-p, 1/2 EtOH, decomp. 225–30°. Alk. cleavage of 10 g. I with 10 g. NaOH in 500 cc. water gave (2,5-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>O)<sub>2</sub>PONa·1/2H<sub>2</sub>O, m. 271–4° (decomp.), and 3 g. [2,5-HO-SNH(p-Me<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>)C<sub>10</sub>H<sub>6</sub>O]<sub>2</sub>POH·2H<sub>2</sub>O, decomp. 230–40°. To a mixt. of 6.5 g. 2,5,7-PhNH(HO)C<sub>10</sub>H<sub>6</sub>SO<sub>3</sub>H and 60 cc. PhNMe<sub>2</sub> was gradually added 5 cc. PCl<sub>3</sub>. The mixt. was kept at 130–40° for 2 hrs. under mech. agitation. Then 150 cc. 15% HCl and 300 cc. water were mixed and the ppt. was filtered off and purified to give 8 g. blue-green 2,5,7-PhNH[(HO)PO]C<sub>10</sub>H<sub>6</sub>SO<sub>3</sub>-C<sub>6</sub>H<sub>4</sub>NMe<sub>2</sub>-p, 1/2H<sub>2</sub>O (II), insol. in alk. solns. and decomp. 175–80°. Alk. cleav-

age of II gave a compd. (analysis approx. C<sub>24</sub>H<sub>20</sub>O<sub>5</sub>N<sub>2</sub>-SPNa·1 1/2H<sub>2</sub>O), decomp. 195–202°, and another compd.



decomp. 200–10°. Isolations of the various compds. were presented in detail. Emil C. Marcusiu

4E3d  
4E2C (y)  
289 (mg)  
4

gg

REICHEL, # 1.4

The separation component in the synthesis of organic dyes. IV. Modification of the blue component in the synthesis of some asymmetric azo dyes. Reichel, A. Demian, and E. Secoan. *Acad. rep. populare Romina, Baza cercetari stiint.* Timisoara, *Studii cercetari stiint., Ser. stiinta chim.* 4, 35-46 (1957); cf. C.A. 53, 1717s.—The effect of structural modifications of the blue component of asym. azo dyes upon the initial shade was investigated. 1,8-Aminonaphthol-2,4-disulfonic acid (I), 1,8-aminonaphthol-3,6-disulfonic acid (II), 1,8-aminonaphthol-2-(phenylazo)-3,6-disulfonic acid (III), 1,8-aminonaphthol-2-(4-aminophenylazo)-3,6-disulfonic acid (IV), 1-acetamido-8-naphthol-3,6-disulfonic acid (V), and 1-(5-salicylazo)-2-(4-nitrophenylazo)-8-naphthol-3,6-disulfonic acid (VI) were coupled with diazotized intermediates. Intermediate A (by coupling tetrazotized benzidine with salicylic acid (VII)) was coupled with I, II, III, and IV. Intermediate B (by coupling tetrazotized 2,2'-diaminobiphenyl with VII) was coupled with I, II, III, and IV. Intermediate C (by coupling diazotized 3-nitroaniline with VII, reduction of the nitro group, and diazotization of the resulting amino group) was coupled with II, III, and IV. Intermediate D (formed like C but starting with 4-nitroaniline) was coupled with II, III, IV, V, and VI. In all cases the resulting dye was salted out (NaCl) and filtered. Only the color of each dye is reported but no other phys. data are given. Chromochromism is reported for most of the dyes prepd., in particular for 1,8-aminonaphthol-2-(4-nitrophenylazo)-3,6-disulfonic acid. M. Cole.

am y  
4 2 a gj

H



REICHEL, I.

RUMANIA/Chemical Technology - Chemical Products and Their  
Application, Part 4. - Natural and Synthetic  
Caoutchouc, Rubber.

H-31

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 48893  
Author : I. Reichel, W. Schmidt, I. Pall  
Inst : -  
Title : Application Technology of Some Dyes for Rubber Coloring.  
Orig Pub : Ind. ussara, 1957, 4, No 3, 110-115.  
  
Abstract : Tests of various dyes for dyeing rubber under various  
technological conditions were carried out. Structure  
formulae of 6 dyes used for dyeing rubber composition  
are presented.

Card 1/1

RUMANIA/Organic Chemistry - Synthetic Organic Chemistry.

G-2

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 21404

76.6%, melting point 138° (from water). III was synthesized by the same method, yield 70.3%, melting point 124°. IV was obtained at a very low yield.

Card 3/3

REICHEL, I

Separation component in the synthesis of organic dyes.

VI. Behavior of the naphthalene-1,5-disazo system. I. Reichel and A. Ballint. *Acad. rep. populare Romane, Baza cercetarii stiint. Timisoara, Studii cercetarii stiint. Ser. I 4*, 33-49 (1967); cf. *C.A.* 53, 18489c. The naphthalene-1,5-disazo and naphthalene-1,4-disazo systems are shown to be adequate sepn. components in the synthesis of asymmetric azo dyes. The green dyes are prepd. by introducing a yellow and a blue component in the system. Salicylic acid, 1-phenyl-3-methyl-5-pyrazolone, and the anilide of acetoacetic acid are employed as the yellow component; 1,8-aminonaphthol-2-(4-nitrophenylazo)-3,6-disulfonic acid (I) as the blue component. The synthesis giving best results involves the following stages: partial diazotization of 1,5-bis-(sulfoamino)naphthalene (II), the coupling of II with 1-phenyl-3-methyl-5-pyrazolone or with the anilide of acetoacetic acid, diazotization of the 2nd sulfoamino or amino group, and final coupling with the blue component I.

VII. Absorption spectra of certain azo dyes with naphthalene-1,5-disazo and naphthalene-1,4-disazo as the central components. *Ibid.* 51-63. A comparative study was made of the absorption spectra of asymmetric green and yellow-orange dyes, resp., of the series naphthalene-1,5-disazo (III), and naphthalene-1,4-disazo (IV), with the absorption spectra of combinations representing the yellow and blue components, or with a mech. mixt. of the latter. The absorption spectra of III and of IV were also compared to the spectrum of a similar dye, but lacking the naphthalene-disazo central component. It is shown that the presence of III and of IV in the center of the molts. results in the intramol. optical mixing of the colored terminal components. The independent behavior of the terminal components in the asymmetric green dyes, and in the sym. yellow-orange dyes is observed in the general shape of the absorption curves, in the position of the max., and in the intensity of absorption in certain characteristic spectral regions. The systems III and IV can be employed as sepn. components in the synthesis of asymmetric azo dyes, assuming the selection of appropriate terminal components. This conclusion is supported by the tinctorial behavior of the studied asymmetric dyes.

R. A. Sanford

REICHEL, I.

A contribution to the synthesis of aromatic oxo acids. V. The properties and molecular constants of the addition compound  $\text{AlCl}_3 \cdot \text{MeNO}_2$ . I. Reichel, and R. Vilceanu. *Acad. rep. populare Romine, Baza cercetarii stiint. Timisoara, Studiul cercetarii stiint.* 5, 35-62(1958)(German summary 62-6); cf. C.A. 53, 19958e.—The catalytic action of  $\text{AlCl}_3$  was investigated by Schmerling (C.A. 43, 108e) in alkylation of aromatic hydrocarbons, and by these authors in the synthesis of aromatic oxo acids. In both series certain peculiarities of the catalytic action were established; these led to the assumption of the existence of an equimol. addn. compd.,  $\text{AlCl}_3 \cdot \text{MeNO}_2$  (I). The best method for the prepn. of I consisted of mixing the components in a benzene soln. and evapg. the solvent in high vacuum to prevent decompn. of the product. The I obtained was a white cryst. substance, stable when kept protected from humidity, but becoming yellow after 2-3 weeks (sooner if kept in access of light). Moisture gradually decompd. I to give finally an amorphous powder which did not melt at  $300^\circ$ . I decompd. violently in contact with  $\text{H}_2\text{O}$ , but dissolved easily in  $\text{C}_6\text{H}_6$ . I m.  $76-81^\circ$  in an N atm. Peter P. Croitoru

4E3d

1-8-8 - NB

4E2c (p)

REICHEL, I.

"Identification and determination of amount of aromatic sulfonic acids;  
an analytic checking of sulfonation processes."

p. 78 (Revista De Chimie) Vol. 7, no. 2, Feb. 1956  
Bucharest, Rumania

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

REICHEL, I.; SCHMIDT, W.; PALL, I.

"The technology of certain products for rubber coloring."

p. 110 (Industria Usoara) Vol. 4, no. 3, Mar. 1957  
Bucharest, Rumania

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

REICHEL, I.

RUMANIA/Organic Chemistry. Synthetic Organic  
Chemistry.

E-2

Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26772.

Author : Reichel, I.

Inst : Academy of People's Republic of Rumania...

Title : To The Replacement of Condensed Triphenyl-  
methanetriketone Systems.

Orig Pub : Studii și cercetări științ. Acad. RPR. Baza  
Timișoara, Ser. 1, 1955, 2, No. 1 - 4, 91 -  
96.

Abstract : 2-CH<sub>3</sub>-4-CH<sub>3</sub>OC<sub>6</sub>H<sub>3</sub>MgBr (I) is condensed with  
phthalic anhydride (II) forming dimethyl  
ester of m-cresolphthalein, the separation of  
which in crystalline state has not succeeded.  
But III produces 2"-carboxy-2,2'-dimethyl-  
4,4'-dimethoxytriphenylmethane (IV) when being  
reduced, the substance C<sub>24</sub>H<sub>26</sub>O<sub>4</sub> (V), probably

Card 1/3

RUMANIA/Organic Chemistry. Synthetic Organic Chemistry.

E-2

Abs Jour: Ref Zhur - Khimiya, No. 8, 1957, 26772.

$o\text{-C}_6\text{H}_4(\text{CHOCH}_2\text{CH}_2\text{-}2\text{-OCH}_3\text{-}4)_2$ , is formed simultaneously seemingly at the expense of the reduction of  $o\text{-C}_6\text{H}_4(\text{COC}_6\text{H}_3\text{CH}_2\text{-}2\text{-OCH}_3\text{-}4)_2$ , which is a byproduct of the reaction of I with II. At the oxidation of IV by  $\text{KMnO}_4$  in alkaline medium, a not crystallizing substance, as it seems 2,2',2''-tricarboxy-4,4'-dimethoxytriphenylmethane, was received. n-Bromo-m-cresol was produced with a yield of 80% by bromination of m-cresol in  $\text{CCl}_4$  at  $-5^\circ$ ; by the action of  $(\text{CH}_3)_2\text{SO}_4$  on it in alkaline medium, 2-CH<sub>3</sub>-4-CH<sub>3</sub>OC<sub>6</sub>H<sub>3</sub>Br (VI) was produced. The mixture of I (of 30 g of VI and 3.65 g of Mg in ether) and of 7.5 g of II in 110 ml of  $\text{C}_6\text{H}_6$  is heated 3 hours, dissociated with diluted HCl, and 20 g

Card 2/3



REICHERT, G.

Euphantria cunea Drury and the latest experiments in protection. p. 51.  
K. ZILMENEYI, Budapest. Vol. 8, No. 1/2, 1955.

SOURCE: EEAL Vol. 5, No. 7, July 1956

1101111, 1.

"Manufacturing System and Output of Refrigerators", . 1.2, (MOSHE  
1101111111, Vol. 7, No. 10, October 1954, Budapest, Hungary)

11: Monthly List of East European Accessions (EPA), 10, Vol. 4, No. 3,  
March 1955, Incl.

LEICHART, C.

HUNG

✓ Control of *Hyphantria cunea*, Drury. C. Reichart and L. Szalay-Marzso (*Acta agron. Hung.*, 1954, 4, 279-312). Spraying of mulberry trees with a 10% oil emulsion containing up to 10% of DDT is more effective than dusting; and also kills adult larvae. Control should, however, be directed as far as possible against larval populations when in the less developed and more susceptible stages.

P. S. ARUP

REICHART, G.

"Contribution to the biology of *Perotis lugubris* F." p. 71. (ACTA AGRONOMICA  
ACADEMIAE SCIENTIARUM HUNGARICAE, Vol. 3, no. 1/2, 1953, Budapest.)

SO: Monthly List of East European Accessions, Vol. 2, #6, Library of Congress  
August, 1953, Uncl.

REICHART, G.

"Contribution to the biology of Capnodis Tenebrionis L." p. 88. (ACPA  
AGRONOMICA ACADEMIAE SCIENTIARUM HUNGARICAE, Vol. 3, no. 1/2, 1953, Budapest.)

SO: Monthly List of East European accessions, Vol. 2, #8, Library of Congress  
August, 1953, Uncl.

REICHARDT, H.

Practical experience in the use of trichlorophon in the control of sanitation pests. J. hyg. epidem. 6 no.3:328-333 '62.

1. VEB Fettchemie, Biologische Laboratorien, Karl-Marx-Stadt.  
(INSECTICIDES)

REICHHART, Stefan (Wroclaw)

Commemorative meeting for Fridtjof Nansen. Czasop geograf 33 no.3:389-390 162.

REICHHART, Stefan (Wroclaw)

Cosmic dust and its falling on the globe. Wszechswiat no.7/8:174-  
176 J1-Ag '62.



Reichbach, Juliusz

✓ Reichbach, Juliusz. On completeness of the restricted  
functional calculus. Studia Logica 2 (1955), 213-228.  
(Polish)  
Polish version of Studia Logica 2 (1955), 229-250 [MR  
17, 446]. H. Huz (University Park, Pa.).

11/10/55

13

REICHL, D.

Transport of fatty acids. Cesk. fysiolo. 9 no.4:338-368 J1 '60.

1. Ustav pro choroby obehu krevniho, Praha-Krc.  
(FATTY ACIDS metab.)

Reichel, I.

Reichel, I.: Chimia si tehnologia colorantilor azoici.  
Bucharest: Acad. Republicii Populare Romine. 1955.  
352 pp.

The Chemistry and Technology of Azoic Dyes

Rumania/Chemical Technology. Chemical Products and Their Application -- Industrial organic synthesis, I-14

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5676

Author: Reichel, I.

Institution: None

Title: Qualitative and Quantitative Determination of Aromatic Sulfoacids  
Analytical Control of Sulfonation Process

Original

Publication: Rev., chim., 1956, 7, No 2, 78-84

Abstract: Methods of analytical control of the sulfonation process of aromatic compounds, are considered: determination of the sulfonation end-point and separation of the mixture of products; total content of sulfo-acids in the mixture; degree of sulfonation (content of mono-, di-, tri- and polysulfo-acids); nature and amount of byproducts, primary product or isomers in the sulfonated mixture. Bibliography, 37 references.

Card 1/1

PELCHER, I.

Contribution to the substitution of the triphenylmethane-tricetonic condensed system. p. 91

Academia Republicii Populare Romane. Raza de Cercetari Stiintifice, Timisoara. STUDII SI CERCETARI STIINTIFICE. SERIA I: STIINTE MATEMATICE, FIZICE, CHIMIE SI TEHNICE. Vol. 2, No. 1/4, Jan./Dec. 1955

Timisoara, Rumania

SOURCE: East European List (EEAL) Library of Congress, Vol. 6, No. 1, January 1957

REICHEL, J.; BALINT, A.; DEMIAN, A.; SCHMIDT, W.;

Sulfonation of 2-methylnaphthalene with sulfuric acid at 160°C.  
Rev chimie Roum 9 no.11:751-756 N '64.

1. Rumanian Academy, Scientific Research Institute, Timisoara  
Branch of Organic Chemistry, Laboratory of Dyes and By-Products,  
24 Bd. Mihai Viteazul.

REICHEL, J.; VILCEANU, R.

New conclusion<sup>7</sup> related to the synthesis of aromatic ketonic acid,  
and contributions to the knowledge of the molecular addition compounds  
 $\text{AlCl}_3 \cdot \text{CH}_3\text{NO}_2$ . Rev chimie 5 no.1:67-84 '60. (EEAI 10:2)

1. Akademie der RVR, Forschungslaboratorium fur Farbstoffe,  
Timisoara.

|                      |                |
|----------------------|----------------|
| (Aromatic compounds) | (Oxo acids)    |
| (Aluminum chloride)  | (Nitromethane) |

REICHEL, J.; SCHMIDT, W.

Separating components in the synthesis of organic dyestuffs. XIII. On the behavior of central anthraquinone components; a synthetic communication. Rev chimie 5 no.1:107-117 '60. (EEAI 10:2)  
(Dyes and dyeing) (Organic compounds) (Anthraquinone)



REICHEL, J.; SCHMIDT, W.

Separating components in the synthesis of organic dyestuffs. XII.

Absorption spectra of some anthroquinone-1,5 diazoic compounds.

Studii chim Timisoara 6 no.1/2:77-85 Ja-Je '60. (EEAI 10:3)

(Dyes and dyeing) (Absorption spectra)

(Organic compounds) (Anthraquinone)

(Diazo compounds)

REICHEL, J.; BALINT, A.

On the arylation of the bromoamino acid with sminonaphthosulfonic acids. Studii chem Timisoara 6 no.1/2:87-94 Ja-Je '60. (EEAI 10:3)  
(Amines) (Aryl groups) (Sodium)  
(Aminobromoanthraquinonesulfonic acid)  
(Aminonaphtholsulfonic acid) (Dyes and dyeing)

REICHEL, J.; PURDELA, D.

Aromatic compounds of phosphorus. III. On the action of an excess of  $\text{PCl}_3$  in the reaction of the naphthionic acid with 2,3-oxynaphthoic acid, and on their acylated compound in the medium of dimethylaniline. Studii chim Timisoara 6 no.1/2:95-100 Ja-Je '60. (EEAI 10:3)  
(Phosphorus) (Aromatic compounds) (Phosphorus chlorides)  
(Naphthionic acid) (Hydroxynaphthoic acid) (Acylation)  
(Dimethylaniline)

REICHEL, J.; SCHMIDT, W.

Separating components in the synthesis of organic dyestuff. XIII.  
On the behavior of the central anthroquinone component: a synthetic  
communication. Studii cerc chim 8 no.2:213-226 '60. (EEAI 10:2)

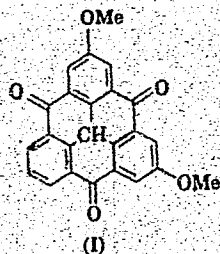
1. Baza de cercetari stiintifice a Academiei R.P.R., Laboratorul de  
coloranti, Timisoara.

(Dyes and dyeing) (Organic compounds) (Anthroquinone)

Reichel ; J.

Substitutions in the condensed triphenylmethane triketone system. J. Reichel. *Acad. rep. populare Romine, Baza cercetării chimice, Studii cercetări științ. Ser. 1*, 2, 91-6(1955).—In an attempt to synthesize 4,4'-dimethoxytriphenylmethane triketone (I) 2,2'-dimethyl-4,4'-dimethoxytriphenylmethane-2"-carboxylic acid (II) m. 164°, sol. in glacial HOAc, and 4,4'-dimethoxytriphenylmethane-2,2',2"-tricarboxylic acid (III) were obtained. *o*-Phenylene-

bis(2-methyl-4-methoxyphenyl)carbinol, m. 170-1°, is obtained as a by-product in the prepn. of II. Due to the fact that III is not cryst., it cannot be proved with certainty if



the coloration obtained by treating III with  $H_2SO_4$  is actually due to the formation of I. Werner Jacobson

REICHEL, I.;SCHMIDT, W.

Separating Components in the synthesis of organic dyestuffs. XI. Synthesis of some symmetrical -1,5-, and -1,4-diazo compounds of anthraquinone. p. 61.

STUDII SI CERCETARI DE CHIMIE. Bucuresti, Rumania.  
Vol. 7, no. 1, 1959.

Monthly List of East European Accession (EEAI). LC, Vol. 8 No. 9, September, 1959

Uncl.

REICHEL, J.

6

A modification of the primulin fusion and the separation of the melt by alcohol extraction. J. Reichel, R. Palea, S. Iacobescu, and G. Gruescu. *Acad. Populare Rom. (Timisoara), Studii cercetari stint.* 1, No. 1/4, 47-56 (1951) (French summary).—The process is characterized by (a) fusing in  $C_{12}H_{22}$  (1) at  $210^{\circ}$ ; (b) removing 1 from the preheated mixt. ( $210^{\circ}$ ) by supersatd. steam at  $250^{\circ}$ ; (c) sepg. of the reaction products at  $45-50^{\circ}$  with 95% EtOH. This led to higher yields (1:1 ratio to the primulin base) of dehydrothio-*p*-tozuidine. This was stable in supersatd. steam up to  $200^{\circ}$  while the usual impurities [*p*-MeC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> and 4,2-Me(HS)C<sub>6</sub>H<sub>3</sub>NH<sub>2</sub>] were removed easily.

Gary Gerard

4

PM 221

Reichel, J.

The separation of 1-naphthylamine-8-sulfonic acid from a mixture containing Laurant's acid. J. Reichel, P. Iacobescu, and I. Penescu (Inst. Ind. Chem. Timisoara, Romania). Acad. rep. populare Romine (Timisoara), Studii cercetari stiint. i, No. 1/4, 43-6(1954) (French summary).-- Of 2 methods evaluated, the industrial sepn. by salification of 1,8-H<sub>2</sub>NC<sub>10</sub>H<sub>6</sub>SO<sub>3</sub>H.H<sub>2</sub>O from a mixt. contg. its 1,6-isomer is more complicated but cheaper than the sepn. by treating with 10% NaOH. Both are equally effective.

Gary Gerard

chem 3  
PM

000



REICHEL, THEOPHIL

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their  
Application. Ceramics. Glass. Binders. Concrete.

H-13

Abs Jour: Referat Zhur-Khimiya, No 5, 1958, 15888.

Author : Ladman Rudolf, Reichel Theophil.

Inst :

Title : Transparent Conductive Layers on Glass.

Orig Pub: Slaboproudy obzor, 1957, 18, No 4, 134-137

Abstract: A review of the different methods of coating glass with  
transparent conductive layers. Particular attention is  
given to the so-called oxide layers.

Card : 1/1

REICHEL, J.; PURDELA, D.

Aromatic compounds of phosphorus. IV. On the action of phosphorus trichloride on the 2'-(5'-oxy-7' -sulfo) naphthylid of the 2,3-oxy-naphthoic acid in the medium of dimethylaniline. Studii chim Timisoara 6 no.3/4:95-102 JI-D '59. (EEAI 10:4)

(Phosphorus) (Aromatic compounds) (Phosphorus chlorides)  
(Naphthyl group) (Aminonaphthosulfonic acid)  
(Hydroxynaphthoic acid) (Dimethylaniline)

REICHEL, J., prof.; DEMIAN, A.

Separating components in the synthesis of organic dyestuffs. XIV.  
Spectral aspects of the separating effect of the central triazinic  
component. Studii mat Timisoara 7 no.1/2:99-112 Ja-Je '60.

(EEAI 10:4)

1. Comitetul de redactie, Studii si cercetari, Stiinte chimice,  
Baza de cercetari stiintifice Timisoara (for Reichel)

|                   |                     |            |
|-------------------|---------------------|------------|
| (Dyes and dyeing) | (Organic compounds) | (Triazine) |
| (Ring compounds)  | (Spectrum analysis) |            |

REICHEL, J.; VILCEANU, R.

New contributions to the synthesis of aromatic ketonic acids, and to the knowledge of the compound of the molecular addition  $\text{AlCl}_3 \cdot \text{CH}_3\text{NO}_2$ .  
Studii mat Timisoara 7 no.1/2:113-128 Ja-Je '60.

(EEAI 10:4)

1. Comitetul de redactie, Studii si cercetari, Stiinte chimice, Baza de cercetari stiintifice Timisoara (for Reichel)

|                      |                  |
|----------------------|------------------|
| (Aromatic compounds) | (Oxo acids)      |
| (Aluminum chloride)  | (Methyl nitrite) |

REICHEL, J., prof.; PURDELA, D.

On the dyeing behavior of 2-oxy-3-naphthoyl-(2',5'-aminonaphthol-7-sulfonic acid. Studii mat Timisoara 7 no.1/2:129-136 Ja-Je '60.

(EEAI 10:4)

1. Comitetul de redactie, Studii si cercetari, Stiinte chimice, Baza de cercetari stiintifice, Timisoara (for Reichel)  
(Dyes and dyeing) (Hydroxy compounds)  
(Aminonaphtholsulfonic acid)

REICHEL, T.

4553. TRANSPARENT CONDUCTING LAYERS ON GLASS.

R. Ladman and T. Reichel.  
Slabopravdy Otzer, vol. 18, No. 4, 195-7 (1957). In Czech.

This survey mentions two methods (evaporation and cathodic pulverization) of the preparation of thin metallic layers (films) on glass and describes two methods (evaporation of  $\text{SnCl}_2$  and the spraying of a solution of  $\text{SnCl}_2$ ) of producing the conducting films of oxides.

Application of the films in vidicons, picture tubes, image converters, X-ray intensifiers, high-speed photographic shutters and electroluminescent amplifiers is briefly discussed.

R.S. Sidorowicz

any

REICHEL, W., mernok (Leipzig, Germany)

Influence of various fine-grained substances on the properties of cement stone, i.e. concrete. Epitoanyag 14 no.6:235-240  
Je '62.

1. Lipcsei Építészeti Főiskola Epitoanyagok és Fizika Intézet.

RATCHEL, A.

"Comparative survey of front ends of television receivers"

Funk u. Ton, 6, 406-15 (Aug., 1952) In German

SO: SCIENCE ABSTRACTS, Section B, Electrical Engineering Abstracts, (February 1953) Unclass



KTH, G.; SAKI, H.; REICHELT, F.; SAFR, E., iz [translator]

Possibilities of reducing the consumption of lubricants. Ropa  
a uhlie 7 no.1:22-26 Ja '65.

REICHELT, J.

Photometric determination of physostigmine. Cesk. farm. 2 no.9:293-295  
Sept 1953. (GIML 25:4)

1. Of the Control Pharmaceutical Institute in Prague.

REICHEL, Jaroslav

Separation of alkaloids 1. Determination of scopolamine and atropine  
in combined injection preparations. Cesk. farm. 3 no.10:330-333  
Dec 54.

1. Z kontrolního ústavu farmaceutického v Praze  
    (ATROPINE, determination  
      in combined inject. prep.)  
    (SCOPOLOAMINE, determination  
      in combined inject. prep.)

REICHEL, J.

Quantitative determination of tropane alkaloids in mixtures by means of paper chromatography and colorimetry; determination in galenic and pharmaceutical preparations and in crude drugs. J. Reichelt (Pharmaceut. Control Inst., Prague). *Pharmazie* 9, 605-72 (1954). Chromatography with formamide-impregnated paper and  $\text{CHCl}_3$  or  $\text{CHCl}_3\text{-C}_6\text{H}_6$  mixts. as mobile phase seps. atropine, hyoscyamine, and scopolamine, which can then be eluted and quantitatively detd. colorimetrically by a modified Vitali reaction. Ratios of hyoscyamine (or atropine) to scopolamine as high as 1:30 can be sepd. with  $\text{CHCl}_3$  (32 hrs.), and ratios as high as 50:1 with mobile phase  $\text{CH}_2\text{Cl}_2$  8:4 (28 hrs.). 83 references. G. M. Hockley

REICHELT, Jaroslav; SAFARIK, Ludek

Decomposition of nonstabilized solutions of ergometrin.  
Cesk. farm. 4 no.8:404-407 Oct 55.

1. Z Kontrolního ustavu farmaceutického (KUF) v Praze.

(ERGOT ALKALOIDS

ergonovine, eff. of oxygen, temperature &  
ultraviolet rays on stability)

(OXYGEN, effects

on stability of ergonovine)

(TEMPERATURE, effects

on stability of ergonovine)

(ULTRAVIOLET RAYS, effects

on stability of ergonovine)

REICHELT, J.

✓ 2768. The analysis of reserpine. J. Reichelt *Med*  
(Pharm. Control Inst. Prague, Czechoslovakia).  
*Czechoslov. Pharm.*, 1956, 5 (9), 518-519. — A colorimetric method for the determination of reserpine in tablets is based on the formation of an addition product of reserpine with methyl orange (molecular ratio 1:1). *Procedure*—Pulverised tablets ( $\approx 0.5$  mg of reserpine) are shaken with 10 ml of water for 5 min., a 25% soln. of  $\text{Na}_2\text{HPO}_4$  (10 ml) is added, and reserpine is extracted with  $\text{CHCl}_3$  ( $4 \times 25$  ml). The  $\text{CHCl}_3$  extract (25 ml) is mixed with 5 ml of reagent A (0.1 g of methyl orange dissolved in 100 ml of warm 4%  $\text{H}_2\text{BO}_3$  soln.), and shaken vigorously for 3 min. To the lower layer is added anhyd.  $\text{Na}_2\text{SO}_4$  (0.2 g), and the completely clear soln. is decanted. A portion (5 ml) is mixed with 1 ml of reagent B (1 ml of conc.  $\text{H}_2\text{SO}_4$  in 50 ml of ethanol), and the colour is measured. The concn. of reserpine is calculated from a standard curve. The presence of reserpine was detected by paper chromatography on Whatman No. 1 paper (impregnated with formamide-ethanol, 1:1). The chromatogram is developed with formamide-benzene. In u.v. light a greenish-blue fluorescence appears on chromatograms dried at  $120^\circ$ . J. VOLKE

REICHELT, J.

✓ Paper chromatography of alkaloids. II. Identification of several alkaloids in pharmaceutical preparations. J. Reichelt (Pharm. Control Inst. (KUF), Prague). *Pharmazie* II, 718-24 (1956); cf. C.A. 49, 14263b. One-dimension distribution chromatography on formamide-impregnated paper was used in a method for sepn. of quinine, quinidine, cinchonine, and cinchonidine. The mobile phase was  $\text{CHCl}_3$ , or mixts. with  $\text{C}_6\text{H}_6$ , toluene, and xylene. With these systems, strychnine, brucine, yohimbine, physostigmine, pilocarpine, emetine, and colchicine could be chromatographed simultaneously as separate spots. To make the spots visible, ultraviolet light or modified Dragendorff reagent was used. Factors in reproducibility of results include temp., degree of satn. of chamber with solvent vapor, height of solvent level in reservoir, quality of formamide, and thoroughness of paper impregnation. The method was successfully applied to 16 com. preps., simple and complex. 54 references. C. M. Hocking

CZECHOSLOVAKIA / Chemical Technology. Pharmaceuticals. H-17  
Vitamins. Antibiotics.

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 78741.

Author : Reichelt, J.

Inst : Not given.

Title : Paper Chromatography of Alkaloids. III. The  
Identification and Semi-Quantitative Determina-  
tion of Skopolamine in the Preparation of Noven-  
onskopolamine and Morphine-diolanskopolamine.

Orig Pub: Ceskosl. farmac., 1957, 6, No 5, 249-251.

Abstract: For the determination of small amounts of skopol-  
amine (I) in the presence of morphine and ethyl-  
morphine, even in a ratio of 1:100:120, two ml  
of the preparation is diluted with three ml of  
water and is made alkaline to phenolphthalein.  
The mixture is extracted with chloroform, the

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CZECHOSLOVAKIA / Chemical Technology. Pharmaceuticals. H-17  
Vitamins. Antibiotics.

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 78741.

Abstract: extracts are filtered and diluted with chloroform to 50 ml. The amount of solution containing 48-50 mg hydrobromide of I, evaporated to a volume of ~ 0.5 ml and is chromatographed on paper, impregnated with an alcohol solution of formamide, with a mixture of benzene — chloroform (1:1) for 50 hours. The location of spots of I is established with the Dragendorff solution (II). The strip of paper containing a spot in duplicate experiment is cut out and extracted with a mixture of acetic acid (6 ml), methanol (III) (50 ml) and water (to 100 ml). The extract is evaporated to dryness, dissolved in ~ 2 ml of hot III, evaporated to 0.5 ml., and quantitatively transferred on paper, impregnated with 0.2 N  $\text{KH}_2\text{PO}_4$ . The

Card 2/3

CZECHOSLOVAKIA

PIETRA, J.; REICHEL, J.; STERBA, J.; Research Institute of Natural Drugs (Vyzkumny Ustav Prirodnich Leciv), Prague.

"The Role of Isomerization in Basically Catalyzed Deacetylation of Lanatosides."

Prague, Czechoslovenska Farmacie, Vol 15, No 5, Jun 66, pp 252-253

Abstract /Authors' English summary modified/: Under a given set of conditions basically catalyzed deacetylation takes place selectively in lanatoside A only. In lanatosides B and C it is accompanied by isomerization, which starts later than deacetylation, and appears in the two substances with different intensity. Isomerization products are epoxycardanolides or hydroxy-acids, according to reaction conditions. The substances can be identified on chromatograms by a modified xanthidrol reagent which makes digitoxose visible. 1 Figure, 7 Western, 3 Czech references. (Manuscript received 7 Nov 65).

REICHEL, J.; DOMIAN, A.

Separating component in organic dyestuff synthesis. Pt. 20.  
Studii cerc chim 12 no. 3:233-254 Mar '64.

1. Organic Laboratory (Dyestuff), Section of Chemistry,  
Timisoara Base of Scientific Research, Rumanian Academy.

REICHELT, J.; PITRA, J.

Some new data on the application of thin-layer chromatography.  
Cesk. farm. 12 no.8:416-417 0'63.

1. Vyzkumny ustav prirodnich leziv, Praha.

\*

PITRA, J.; REICHELT, J.; CEKAN, Z.

Methods for separation of natural substances, Pt. 10.  
Coll Cz Chem 28 no. 11: 3072-3078 N° 63.

1. Forschungsinstitut für Natur-Arzneimittel, Prag.

CZECHOSLOVAKIA

REICHELT, J.; PITRA, J.; Research Institute for Botanical Drugs  
[Vyzkumny Ustav Prirodnich Leciv], Prague.

"New Experiences with Applications of Thin-Layer Chromatography."

Prague, Ceskoslovenska Farmacie, Vol 12, NO 8, 1963, pp 416-417

Abstract: A study was made of the chromatography of digitalis glycosides on a thin layer of silica gel. Impregnation of the adsorbent with borax resulted in increased retention of substances with cis-vicinal glycol groups. A technique of quantitative application of chromatography to the samples is described.  
2 Tables, 7 Czech references.

REICHEL, Jaroslav

Paper chromatography of local anesthetics. Cesk.farm.4 no.6:297-301 JI. '55.

1. Z Kontrolního ústavu farmaceutického (KUF) v Praze)  
(ANESTHETICS, LOCAL, determination,  
chromatography)  
(CHROMATOGRAPHY,  
of local anesthetics)

REICHELT, J.; PITRA, J.

Methods of separation of natural substances. Part 6: Thin layer chromatography of cardenolides. Coll Cz Chem 27 no.7:1709-1711 J1 '62.

1. Forschungsinstitut fur Natur-Arzneimittel, Prag.



TOROK, Janos, dr.; REICHEL, Wolfgang, dr.

Presternal edema in mumps. Gyermekgyógyászat 15 no.5:147-151  
My'64.

1. A Szegedi Orvostudományi Egyetem Gyermekklinikájának (Igaz-  
gato: Boda, Domokos, dr, egyetemi tanár) és az Éislebeni Kor-  
ház Gyermekosztályának (vezető: Torok, Janos, dr., főorvos)  
közleménye.

\*

REICHELTA, J.

"The Time Cycle of Fuel Injection in Diesel Motors." p. 860 (STROJIRENSTVI, Vol. 3, No. 11, Nov. 1953) Praha, Czechoslovakia

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4, April 1954. Unclassified.

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Planbauer, J.: Chemikalia. Warsaw: R. Reichen-  
bach, 1950. 204 pp. Reviewed in *Przemysl chem.* 29,  
545 (1950).

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1ST AND 2ND ORDERS

PRINCIPLES AND PROPERTIES INDEX

743. Dirac Wave Equation of the First Order with Two Components. E. Reichenbacher. *Phys. Zeits.* 31. pp. 888-889, Oct. 15, 1930. *Paper read before the Deut. Physiker-tag., Königsberg, Sept., 1930.* Discusses in general terms the two-component wave equation of the first order, put forward by the author (see Abstract 925 (1930)), and compares it with the Dirac four-component wave equation. It is suggested that the two-component equation may make possible an explanation of the difference of mass between electron and proton, the general idea being that one wave function would apply to the electron, the other to the proton. Difficulties of the two-component equation are also indicated. W. S. S.

ASS 35A METALLURGICAL LITERATURE CLASSIFICATION

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